

# EXCAVATIONS AT OUE PA, N43/35, SOUTH AUCKLAND

WENDY J. HARSANT

OTAGO MUSEUM

*Abstract.* In the early 1950s Mr V.F. Fisher and students of Ardmore Teachers College excavated a headland pa, N43/35. The pa was found to have been occupied in the late prehistoric and protohistoric periods. The results of the excavation are discussed and the artefact assemblage compared with that from the important Classic Maori site of Oruarangi.

Oue Pa is situated approximately two kilometres northwest of the Wairoa River mouth, South Auckland (Fig. 1). Located on a small headland and surrounded on three sides by mudflats, low-lying land and swamps, it is well placed for defence, food gathering and other economic activities.

The pa has an outer transverse ditch and bank along its southern boundary and an inner ditch and bank system running parallel to and 110 m from the outer ditch. The inner ditch and bank system lies immediately south of a *tihi* stronghold and effectively divides the pa into two areas. These two areas — southern and northern — are rather different in their physical characteristics and will be described separately.

*Southern area.* With the exception of the upper area adjacent to the outer ditch (Fig. 2), the steep slopes of the eastern side are unmodified. The western side with its gentle slopes, however, is extensively terraced. These terraces vary markedly in their size and shape. A causeway or breach in the outer ditch at the highest point is probably of recent origin.

The most striking feature of the southern area and indeed the pa as a whole is the presence of three large midden mounds which are located outside the defences (Fig. 2). Of the two middens south of the outer ditch the upper one, situated by the causeway, is 45 x 13 m and 1.5 m in height. A second midden, 20 m down the western slope is 15 x 20 m and 2.0 m in height. Opposite to this, on the northern side of the ditch lies a smaller area of scattered midden. The size of the third midden mound, which is located inside the ditch but towards the bottom of the terraced slopes of the western side of the pa, is difficult to determine today; its size when excavated in 1951 will be discussed later in this paper.

In addition to the midden mounds, fragmentary midden is sparsely scattered over much of the pa. Indeed, rabbit hole excavations on both the western and eastern sides of the pa suggest that there are further areas of concentrated midden deposits not visible from a surface examination of the site.

*Northern area.* This area has been extensively modified in the past few decades by the construction of a road to the top of the pa and by the quarrying of the northern face. The most prominent feature is the *tihi*, approximately 1200 sq m in area. Situated on the

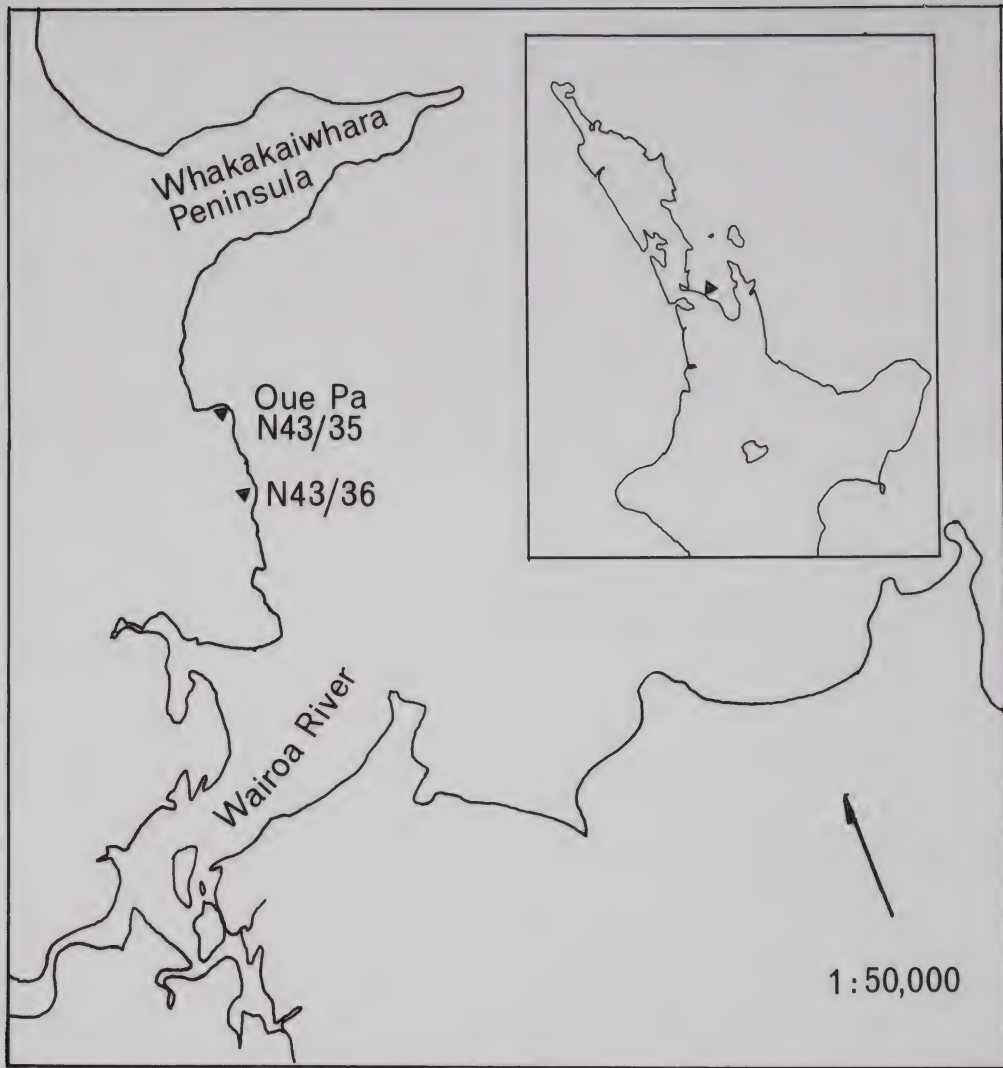


Fig. 1. Location map of Oue Pa, N43/35.

highest point, the *tihi* affords an excellent view of the terraced slopes of the entire pa and the surrounding area. Photographs of this part of the pa, taken prior to its modification, show that the steep slopes on all but the south side were terraced on their upper reaches only. A 10 m high scarp to the double ditch and bank below lie to the south of the *tihi*.

A palisade line of post-holes cut into the rock of the estuary approximately 20 m from the present northeast base of the pa has been reported (Tonson 1966:177, Abercrombe MS.) and is shown in photographs taken in the early 1950s. Why such a laboriously constructed palisade was necessary is difficult to determine but may have been related to

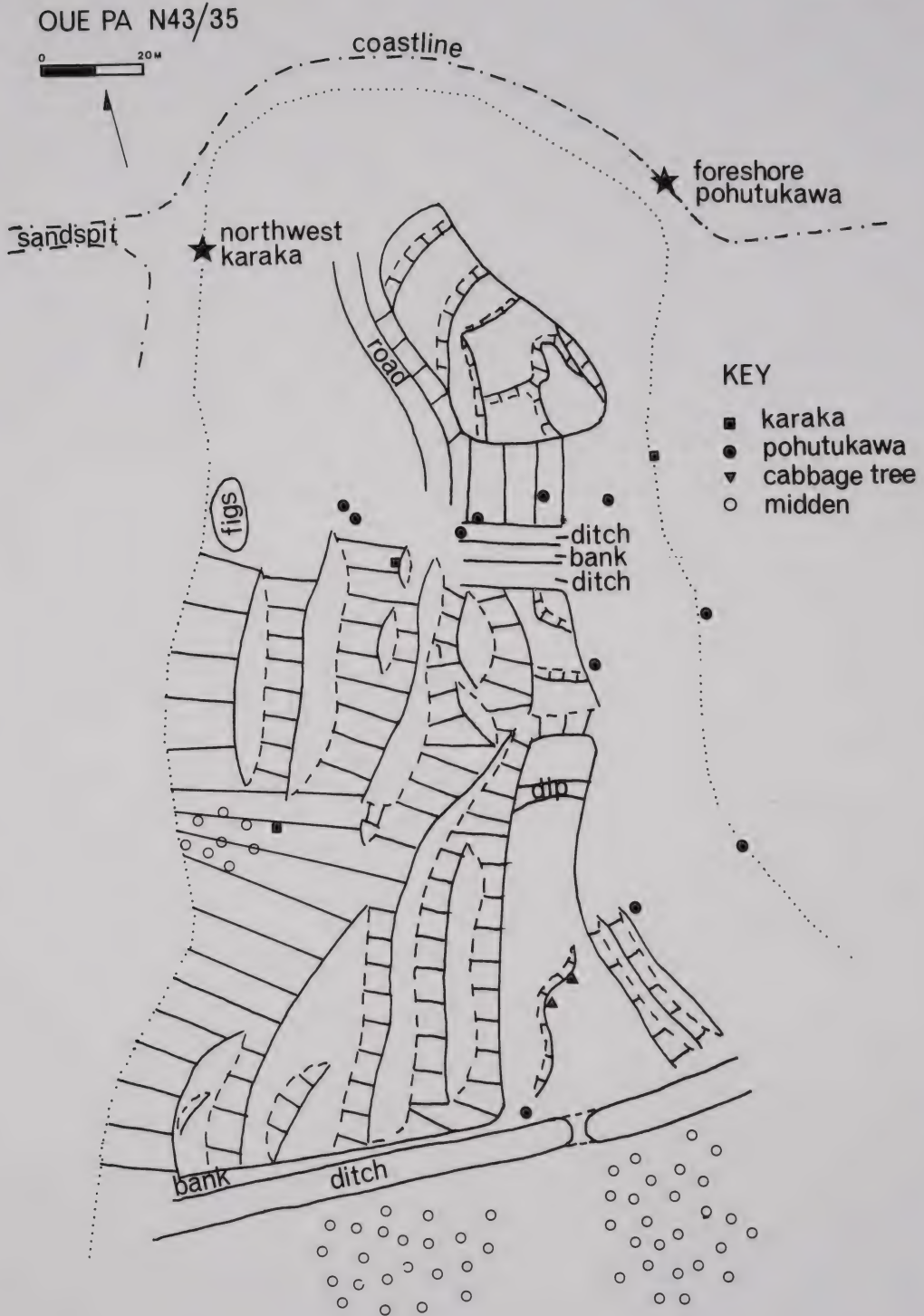


Fig. 2. Plan of Oue Pa, N43/35.

the fact that the lower slopes of the north face were unterraced. Alternatively, the post-holes may have supported some kind of structure other than a palisade or may be European in origin. I was unable to locate them during a recent visit to the site, possibly because the sand and mud, which have filled the many natural holes in the rock, have obscured them.

#### HISTORY OF INVESTIGATIONS

Oue Pa was the subject of intensive fieldwork in the early 1950s by the history students of Ardmore Teachers College under the overall supervision of Mr V.F. Fisher, then Ethnologist at the Auckland Museum. The artefacts found are held in the Museum and all artefact numbers given in this report are Auckland Museum numbers. Excavations were conducted over four field seasons from 1950 to 1953. Although full and precise data on these excavations is not available, student projects written during the 1951 investigations and some fieldnotes kept by Mr Fisher and the staff of Ardmore College in 1952 and 1953 as well as a series of photographs taken during the fieldwork, allow an overall reconstruction of the investigations and an assessment of the occupation of the site to be made.

It has not been possible to determine all the areas excavated during the four years. No information at all is available on the first field season and notes for 1953 are limited to three diagrams of gridded areas and a brief statement of artefacts found. Since it is known that the areas excavated in the preceding years were extensive it is probable that a larger area was opened than that indicated in the 1953 notes. A small amount of shell held at the Auckland Museum marked "Oue Pa midden 1953" suggests that this could be the case although the shell may have been surface collected.

In many instances the exact location of the area excavated is not known. In general these areas are referred to in the fieldnotes by distance from trees although occasionally a direction is given. Where these trees are still standing it has been possible to define with some certainty the precise location of the excavated plot. In other instances, however, excavated plots are referred to in relation to each other or to positions of transient objects and consequently only a general location can be determined.

#### EXCAVATION METHODOLOGY

The aims of the 1952 field season at Oue Pa were to investigate the topics of Maori occupancy in the Hauraki Gulf, the Transitional (Protohistoric) Maori period and Maori Food according to the Ardmore College Course Outline for 1952. Areas around the base of the pa were excavated, particularly at the northern end where a post-European settlement was reputed to be, and a midden was investigated. Although no course outline is available for the previous years, it seems that the students in 1951 were working on similar topics since the areas excavated were also concentrated around the base of the pa and several middens were investigated. The areas known to have been excavated in 1953 are all located either on top or at the southern end of the pa indicating that the emphasis previously placed on the protohistoric period and the economy of the occupants had been replaced by a more intensive investigation of the pre-European history of the site.

All measurements taken during the fieldwork were in feet and inches. These have been converted into metric measurements throughout this report. Where appropriate, both are given.

In 1951 trench excavations were conducted with middens being excavated in 30.5 cm (12 inch) spits and other areas in 15.2 cm (6 inch) spits. Some attempt was made to record the stratigraphy encountered and to note the spit or layer from which artefacts were recovered. In subsequent fieldwork, however, this system was abandoned and a method of excavating gridded squares (without baulks) was adopted. The plots excavated were divided into a series of *ca.* 0.9 x 0.9 m (3 x 3 ft) squares and each square was systematically assigned a grid number according to its placement in the plot. Records were kept of the grid number and depth of important artefacts found. A similar excavation strategy was used in the later excavations by Ardmore College students at Ponui Island (Nichols 1964).

#### THE EXCAVATED AREAS

The areas excavated at Oue Pa have been divided into four groups — middens, swamps, areas around the base of the pa and areas on top of the pa. These will be described in turn below. Fig. 3 shows the locations of the areas excavated.

It is estimated that total minimum areas excavated were: middens, 21.7 sq m; swamps, 63.5 sq m; around the base of the pa, 118.7 sq m; and on the top of the pa, 46.8 sq m.

#### *Middens*

In 1951, three were examined. The first (M1) was on the western slope of the pa, below the terraces. It measured 15.2 x 9.1 m. An 0.9 m wide trench was excavated in it by 30.5 cm spits to a depth of 1.5 m (Sharplin MS.). This midden received further attention in 1952 when a trench 2.7 m in length and 1.2 m in width was excavated. A photograph (Fig. 4) shows that this trench was adjacent to and north of the 1951 excavation.

Another trench was dug through the centre of the midden by the causeway (M2) and a further trench around the edge of this midden. The third midden examined in 1951 was one stated as extending from the summit of the pa to the base on the eastern side (M3). Here a trench was dug from the centre of the midden directly back into the hill (Sharplin MS.). Although not stated in the reports it is probable that the size of the trenches excavated in these latter two middens were the same as the first midden investigated and that these middens were also excavated in 30.5 cm spits.

#### *Swamp excavations*

Farming practices in the past three decades have changed the extent of swampland around Oue Pa. The coastal strip immediately behind the beach on the eastern side of the pa which is today fertile farmland was previously swampy while the swampland around the creek along the western side of the pa was formerly more extensive.

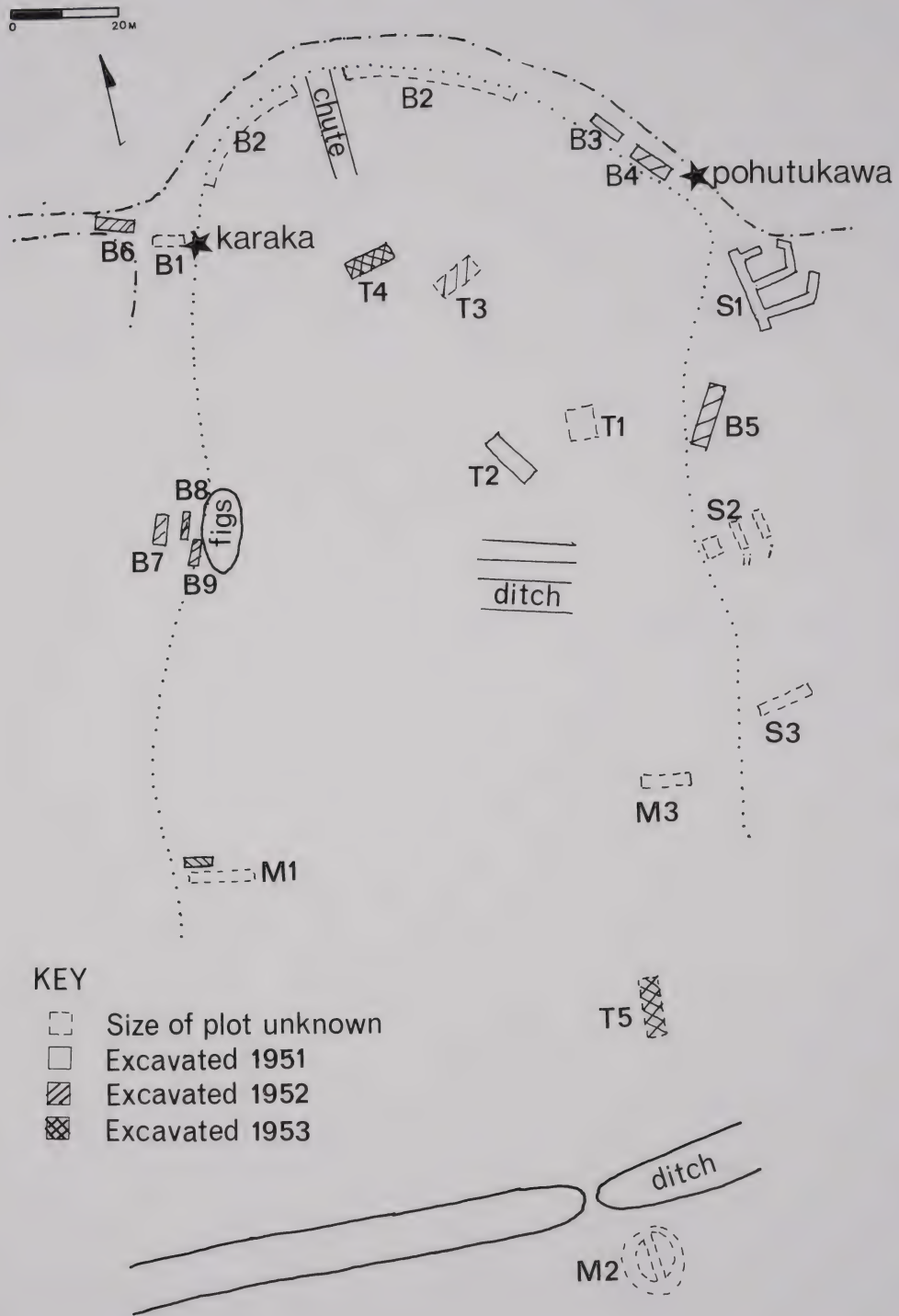


Fig. 3. Plan of areas excavated, 1951-1953.



Fig. 4. The 1952 excavation of Midden M1, with spoil heap from the 1951 excavation on the left.

In 1951, swamp excavations were carried out in the eastern swamp areas. The first (S1) was near the foreshore pohutukawa tree (*Metrosideros excelsa*) (see Figs. 2,3). A trench was dug from near this pohutukawa to another tree, probably standing to the south. This trench was 15.2 m long with subtrenches being dug on the eastern side. The first subtrench was placed 1.8 m from the northern baulk and a further two subtrenches were dug at 4.6 m intervals. Presumably because the subtrenches proved worthy of further exploration these were extended (Fig. 3). At least one subtrench was 0.9 m wide and all were dug to a depth of at least 45.8 cm.

A further two swamps were examined in 1951. From the very meagre sketch plan available it would seem that both of these swamps were situated closer to the base of the pa but since no traces of these swamps remain in this area today, it is not possible to substantiate this without subsurface investigation. It is possible, therefore, that these two areas examined were located considerably further to the southeast of the pa where two small swamps are present today. Two trenches were placed across the oblong swamp (S2) and a further area at the southern end was excavated as well. The position of the trenches and their distance apart is not known. Only one trench was placed across the final swamp excavated (S3). The size of the trench is not known.

#### *Base of the pa*

In 1951, a trial trench was put through a so-called *whare* site (B1) under the karaka tree (*Corynocarpus laevigatus*) on the northwest side of the pa (Figs. 2,5). Photographic evidence (Fig. 6) indicates that either this area was extended in 1951 or another site near



Fig. 5. Opening excavation B1, near the karaka tree. Excavation B2 and the metal chute to the left.



Fig. 6. Extension of excavation B1, in 1951.



the karaka was also excavated. The size of these trenches are unknown although it is likely that the trial trench was of the same width as the midden excavations (0.9 m).

The small bank (B2) around the northern base of the pa was examined in 1951 as well. This was excavated by loosening the soil a metre from the exposed bank and forking through the loosened soil (J. McKinlay pers. comm.). The size of the excavated area is not known although photographs (Figs. 5, 7) indicate that both sides of the metal chute, present on the northwest side of the pa in the 1950s, were examined.

An area (B3) stated to be 10.7 x 10.9 m (but since it was divided into seven grids possibly 10.7 x 0.9 m) at an unspecified distance northwest of the foreshore pohutukawa was excavated in 1951. In the following year a plot (B4) 10.9 m west of the same pohutukawa was investigated. It measured 8.2 x 3.6 m (9 x 4 grids).

Area B5 was also excavated in 1952. This plot measured 10.8 x 2.7 m (12 x 3 grids) and was located 9.4 m from the karaka tree on the southeast side of the pa. The direction of the excavation from the tree is not known. If north, which I think is more likely, it was located between the swamp excavations S1 and S2.



Fig. 7. Excavation B2, west of the metal chute.

An excavation (B6) located on the sandspit, 17.3 m from the northwest karaka tree, was opened in 1952. It was initially 5.2 x 0.7 m in size but was later widened to between 1.5 m and 2.1 m.

A further area examined in that year was B7, 25.3 m west of the fig trees (Fig. 3). A square 2.1 x 2.1 m (2 x 2 grids) was opened and this was increased during excavation to 4.6 x 2.1 m.

Eighteen metres to the east of this plot, B8, measuring 6.1 x 1.2 m, was also excavated. Closer to the fig trees an area (B9) measuring 4.9 x 0.9 m was investigated. Both B8 and B9 were examined in 1952.

A train trench (B10) "in the bank of shell bordering the swamp and six feet (1.8 m) from the edge of the swamp" (Abercrombe MS.) was excavated in 1951. It was dug to a depth of 15.2 cm at the swamp end and 30.5 cm at the other end. Photographs suggest that this plot was situated on the western side of the pa, south of the sandspit.

A further trench (B11) "dug from the drainage ditch of the men's cooking tent" in 1953 cannot be placed with any accuracy at all, but may have been on the western side of the pa.

#### *Top of the pa*

Another so-called *whare* site (T1) on or near the *tahi* was examined in 1951. No further information is available about this excavation.

An area (T2) measuring 10.9 x 0.9 m and located on the northwest slopes by a pathway between the "large pohutukawa and the quarry" was investigated in 1953. Its exact location and relationship to the previous excavations in the immediate area are unknown.

An area (T3) excavated in 1951 is referred to as the "bank near quarry" (Abercrombe MS.). Its location, therefore is most likely to be on the north or northwest slopes of the pa. The dimensions of the excavation are unknown.

A terrace on the northwest slope was also investigated in 1952 when an area (T4), initially measuring 7.0 x 3.0 m but later extended to 8.2 x 3.6 m (9 x 4 grids), situated near the top of the metal chute was excavated.

The only other area on top of the pa known to have been excavated is a terrace on the seaward side of the pa (T5). The extent of this excavation, conducted in 1953, is unknown.

## EXCAVATION RESULTS

### *Middens*

M1. Three layers were identified in the 1.5 m deep trench. The first is recorded as being 30.5 cm in depth. It consisted of the turf layer with fragmentary shell and the underlying concentrated shell deposits with ash, charcoal and oven stones. Shellfish recorded at

present are as follows: cockle (*Chione stutchburyi*) which made up approximately 98% of the deposits, mussel (*Mytilus edulis* and *Perna canaliculus*), pipi (*Paphies australe*), tuatua (*P. subtriangulatum*), mud snails (*Amphibola crenata*), ringed dosinia (*Dosinia anus*), whelks (*Austrosipho adusta* and *Comminella adspersa*) and oysters and scallops (species unknown). Fish bone and a stingray palate were also found.

The next layer, 30.5-91 cm below the surface was similar to, and contiguous with, the first layer. Shell deposits and ash were more concentrated and although oyster and mussel were more common the same shellfish were present. The jaw bone of either a snapper or a hapuka was found as well as a pig tooth. The basal layer was separated from the layer above by a "blackish earth". Scallops were more plentiful in this layer and ash tended to be concentrated in patches.

A section drawing (reproduced in Fig. 8) was made of the trench. It can be seen from this that the layers were more apparent than real.

The fieldnotes for the adjacent 1952 excavation do not record the presence of shell in the midden. A dog jaw and tooth, a pig tusk and a stingray palate were found 23-61 cm deep.

M2. The shellfish present in this midden are recorded as having been the same as those in M1. Scallops were more commonly found and fish bone and oyster less. Cockle comprised 99% of the deposits. An adze, found 22.8-30.5 cm in depth, is described as "flaked with a smooth edge" (Abercrombe MS). Unfortunately it is not in the Auckland Museum collections.

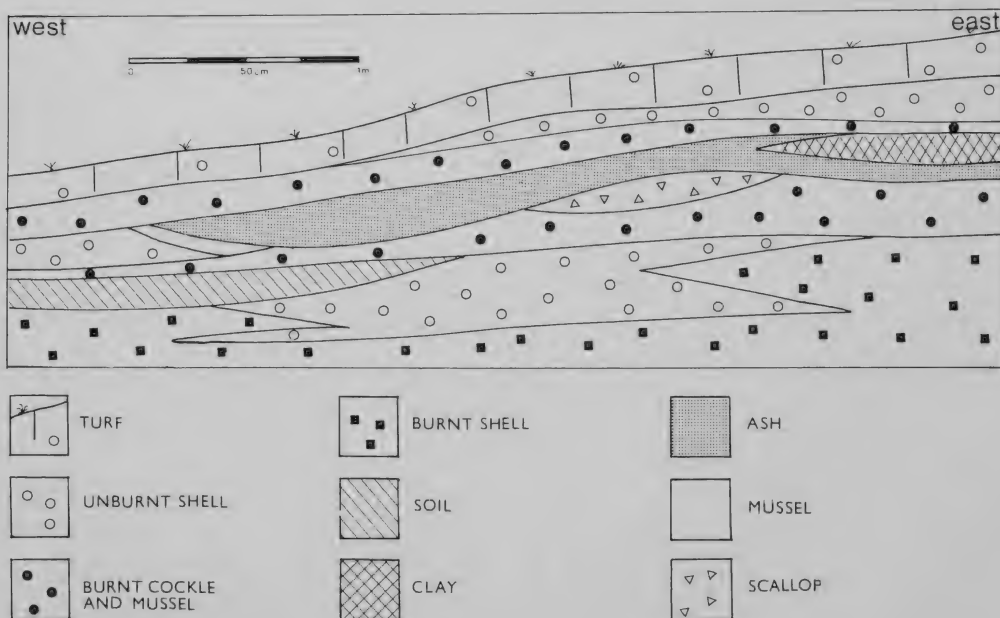


Fig. 8. Section from 1951 excavation of Midden M1. Drawn from Abercrombe MS.

M3. This midden was found to be similar to the previous two midden excavations. The turf layer was deeper and fewer oysters and whelks were present; fish bone was more common.

#### *Swamp excavations*

S1. The stratigraphy uncovered in S1 appears to have been straight forward; a turf layer of heavy damp soil, 22.8 cm in depth, overlay a 7.6 cm sterile "puggy mud" layer. Underlying this was a 15.2 cm deep cultural layer of blue-grey clay with an apparently sterile layer containing non-artefactual shell and rock beneath. In at least one of the subtrenches the "puggy" layer was absent. Artefacts found in the cultural layer included obsidian flakes (one perforated), a flint drill point, flint rock, a tree with signs of having been worked and chips of wood (Boyle MS.). Shell and rock and a number of human bones were also present (Butler MS.). Although it is not explicitly stated, the quantity and type of bones recovered suggest that they were derived from a burial. Many other burials have been reported from the immediate area, one being found "wrapped with string" as recently as 1976 (McKenzie pers. comm.). Other burials have been reported as eroding from the mudflats to the north of the pa (McKinlay pers. comm.).

S2. Both trenches put through S2 were found to contain 40.6-45.7 cm of heavy soil overlying a charcoal enriched clay layer, 22.8-35.6 cm in depth (Boyle MS., Butler MS.), with shell deposits being found at both end of trench (i) and the south end of trench (ii) (see Fig. 3). Which layer the shell deposits were in is not recorded. The trench cut into the southern area of the swamp contained a 91 cm layer of shell and "yellow powder" (Butler MS.), underlying a 38.1 cm layer of loose soil and sand. The presence of sand in the upper layer suggests that this trench may have been located near an old beach line. The shell deposits in this trench and indeed the swamp as a whole may, therefore, be natural. No artefactual material was found in these excavations.

S3. This trench likewise contained no artefactual material. It was excavated to a depth of 76.2 cm and consisted of a rich black soil layer with shell deposits throughout. The density of the shell varied with a 15.2 cm layer of concentrated shell being found 7.6 cm above the basal clay. There is no indication that the shell was cultural. Several peach tree stumps were found in the trench.

#### *Base of the pa*

B1. Two cultural layers were identified during this excavation. Although no description of the soil in either layer, beyond "both mostly shell and charcoal", is available, the upper layer (L.1) is recorded as having been 15.2 cm below the turf and of 15.2 cm depth. The lower layer (L.2), immediately below layer 1, was also 15.2 cm in depth. Since the trench was excavated in 15.2 cm spits the identification of two cultural layers each 15.2 cm in depth must be regarded as somewhat suspect. The type and distribution of material recovered from the trench (see Table 1) does, however, confirm the existence of two distinct cultural layers. It is not known from which layer an adze (32604, see Fig. 9) was derived.

There is no evidence to indicate that the area excavated was in fact a house site. No mention is made of post-holes, a hearth or a cooking area although it is possible that the

Table 1. Cultural material found in excavation B1.

Object	Museum No.	Layer	Comments
Bottle glass	—	1	—
Nails (Iron)	—	1	—
Screws	—	1	—
Clay pipe stems	—	1	—
Scissors	—	1	—
Gun flint	32583	1	—
Slate	—	1	Two pieces mentioned
Obsidian flakes	—	1	—
Shell	—	1&2	Found throughout both layers
Charcoal	—	1&2	Throughout both layers
Fish bones	—	2	—
Obsidian	—	2	—
Teeth	—	2	—
Human tooth pendant	32579	2	Human molar, perforated
Adze (Fig. 9)	32604	—	Duff 1956 type 2B*, mottled dark green/grey argillite. Partly polished, working edge curves to right. Length, 9.7 cm.

\*Duff 1956

size and position of the trench was such that it simply missed these features. It must, however, be concluded that this was not a *whare* site.

B2. There is no record of any stratigraphy encountered during this excavation. Shell and charcoal, obsidian, the broken end of a fish hook shank, a sharpening stone, a dog jaw and skull, kauri gum, a clay pipe stem and a toggle were found.

B3. The stratigraphy of this excavation is unknown as well. The artefacts found are listed in Table 2. There are several other artefacts, including several fish hook points and adzes, accessioned into the Auckland Museum collections in 1951 as having been found at the base of the pa. However, since there are no references to them in the fieldnotes there is no way of provenancing them to either area B2 or B3. They are, therefore, discussed below under "other finds".

Table 2. Cultural material found in excavation B3.

Object	Museum No.	Grid	Depth	Comments
Drill point	—	1	—	—
Adze	—	1	Surface	?Not in museum coll.
Sandstone	—	2	—	—
Obsidian	—	3,5&7	—	—
Adze frag.	206/51	6	—	Dark grey argillite, finely polished. Fragment of working edge of finely polished quadrangular adze
Drill point	—	4	—	—
Kauri gum	—	7	—	—

B4. Thirty square metres were excavated. By the end of the first day the area had been turfed and at least grid 1 had been dug to a depth of 30.5 cm. Very little artefactual material was recovered (see Table 3) and that found was in the western and eastern ends of the plot. With the exception of a peach stone (possibly an intrusion into the site) no post-European material was recovered.

Table 3. Cultural material found in excavation B4.

Object	Grid	Depth (cm)
Peach stone	1.2	25.4
Fish bones	9.2	25.4
Obsidian	7.1	30.5
Fish bones	1.1	30.5
Oven	9.4	61.0
Oven	9.4	76.2

B5. Records were kept for the first two days of excavation only. It is known, however, that further work was carried out. The artefacts found are listed in Table 4. No details of stratigraphy are known.

Table 4. Cultural material found in excavation B5.

Object	Grid	Depth (cm)
Red ochre	7.1	Surface
Obsidian	2.2	5.1
Obsidian	4.2	5.1
Clay pipe stem	3.1	5.1
Red ochre	1.1	7.6
Pocket knife	2.1	10.2
Obsidian	4.2	10.2
Human tooth	6.1	10.2
Oven stones	9.3	12.7
Dog jaw & teeth	5.2	16.5
Dog bone	5.2	16.5

B6. This area, on the sandspit, was excavated over four days and proved to be artefact rich. The first days 'finds' are recorded as having been found "in the clay layer" which implies that at least two stratigraphic layers were recognised. However, as can be seen from Table 5, post-European material was found throughout the deposits.

B7. This excavation, approximately 10 sq m in area, also produced post-European artefacts (see Table 6). An oven was found at an unrecorded depth. It was 76 cm in diameter and had an excavated depth of 1.5 m from the surface. It contained an unusually large quantity of material. Bird and human bone were found in the base of the oven and a change of layering within the oven — cockles, a 1.3 cm lens of fish bone and scallops — was noted.

Table 5. Cultural material found in excavation B6.

Object	Grid	Depth (cm)	Comments
Knife	—	15.2	
Stingray barb	3.2	15.2	<i>Myliobatis</i> sp.
Clay pipe stems	4 ext.	17.8	
Dog bone	5 ext.	17.8	
Dog bone	5.2	20.3	Recorded as having been broken
Clay pipe stem	3 ext.	22.9	
Glass	2 ext.	22.9	
Sandstone	3 ext.	22.9	
Stingray palate	4 ext.	25.4	<i>Dasyatis</i> sp.
Clay pipe bowl	5.1	25.4	Found in clay layer
Tooth	5.1	25.4	Found in clay layer
Red ochre	2.1	25.4	Found in clay layer
Red ochre	6.1	30.5	
Dog tooth	5.2	30.5	
Stingray palate	2.2	30.5	<i>Dasyatis</i> sp.
Clay pipe stem	4 ext.	45.8	
Wooden button	3 ext.	45.8	

Table 6. Cultural material found in excavation B7.

Object	Grid	Depth (cm)	Comments
Iron pieces	2.1	10.2	
Red ochre	2.2	15.2	
Peach stones	1.2	15.2	
Human bone	1.2	22.9	
Human jaw bone	2.2	22.9	
Dog tooth	1.3	22.9	
Rat bone	1.1	25.4	
Clay pipe stem	1.3	25.4	
Tattooing blade	2.2	30.5	
Obsidian	2.1	61.0	
Human bone	5.1	—	Recorded as worked
Fish hook shank	5.1	—	5.1 cm from oven
Red ochre	5.1	—	15.2 cm from oven
Oven	5.1	—	Excavated depth of 1.5 m. Contained peach stones, pig tusk, human bone bird & fish bone, cockles, scallops, 3 clay pipe stems, obsidian, nail

B8, B9. No details of the stratigraphy or the depths of the artefacts found have survived from these two excavations. A piece of glass, obsidian and fragments of human and whale bone were found in the 5.9 sq m area of excavation B8 while only one artefact, a fish hook point, was found in the 4.2 sq m area of B9.

B10. The trench excavation B10, was dug to a depth of 15.2 cm at one end and 30.5 cm at the other. Charcoal, rocks and a piece of worked bone were recovered.

B11. A "series of fish hook shanks" were found at a depth of 15.2 cm in this excavation. No details of stratigraphy are recorded and unfortunately the shanks cannot be identified amongst the Oue Pa assemblage in the Auckland Museum.

*Top of the pa*

T1. No information about excavation T1, on the *tihi*, is available. A bone tattooing chisel, two hammerstones, a bird spear point and a bone needle were accessioned into the Museum collections in 1951 as being "found on the terrace" at Oue Pa. These may have been recovered from this plot. They are described under "other finds".

T2. The material found in this 9.2 sq m area is listed in Table 7. No details of stratigraphy are known.

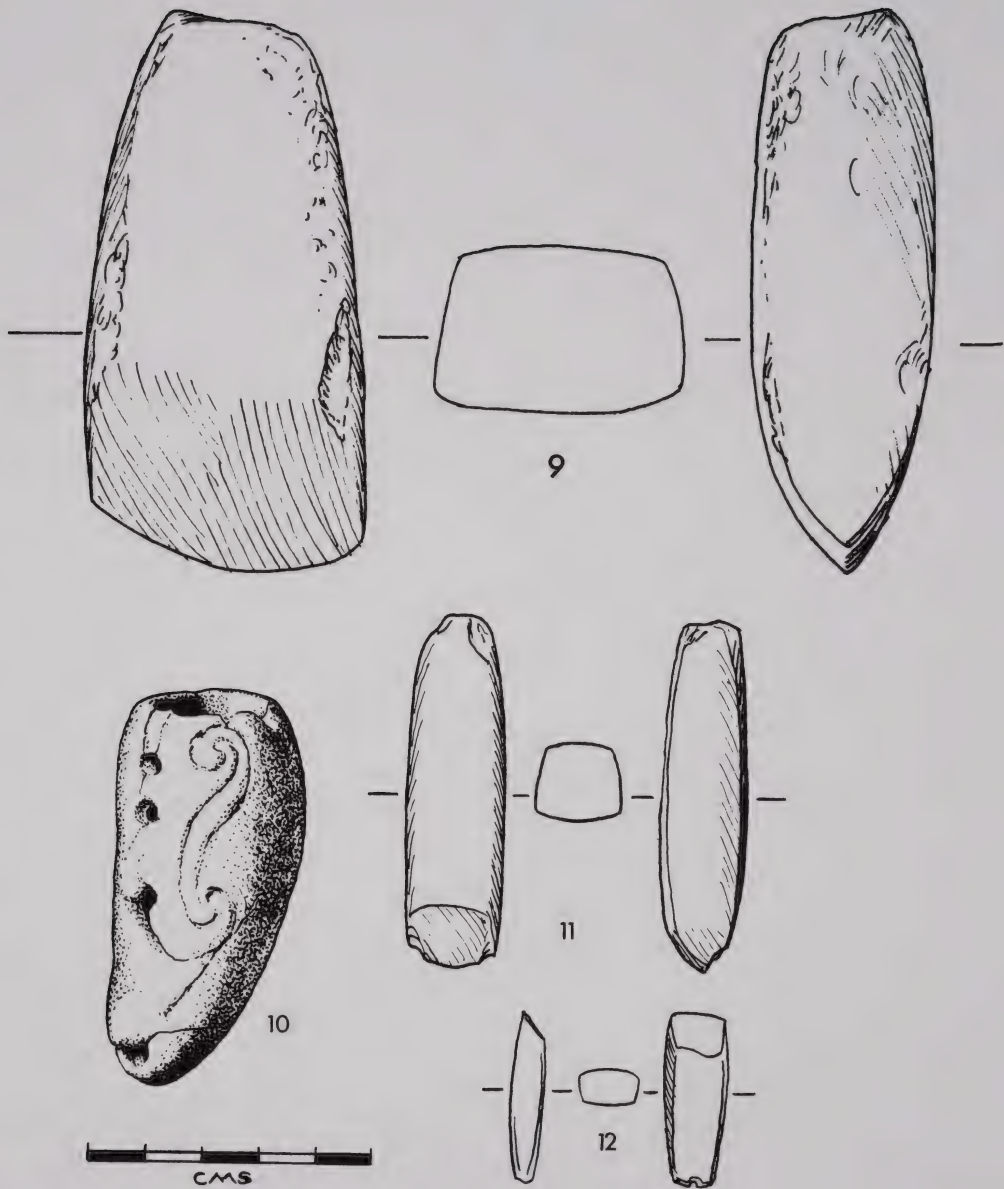
Table 7. Cultural material found in excavation T2.

Object	Grid	Depth (cm)
Fish bone, scales, shell	1-12	Turf layer
Obsidian flake	2	2.5
Cloak pin ? (fragment)	2	2.5
Obsidian flake	1	6.4
Dog jaw bones	4	7.6
Obsidian flake	2	7.6
2 Obsidian flakes	1	10.2
Chert flake	7	15.2
Obsidian flake	3	30.5
Dog tooth	7	30.5
Obsidian flake	3	35.6
Fish hook shank	—	—

T3. The methods used to excavate this bank were no doubt similar to those employed during the excavation of the road bank cutting at the base of the pa (B2). Two cultural layers were identified. As with excavation T2 above, no post-European artefacts were recovered from this plot. The upper layer was 10.2 cm in depth and contained shell midden. An underlying layer (L. 2) was 30.5 cm deep. A dog skull, dog mandible, a toggle, a *nguru* (flute), ochre and charcoal were found. The *nguru* (32582, see Fig. 10) is particularly interesting. It is made of sandstone, has three stops and is 6.6 cm in total length the body being 3.2 cm in diameter. It has been perforated for suspension under the aperture and is decorated with a spiral on one side. It is almost complete having been reconstructed from many fragments. Although not mentioned in the field notes, the damage was probably incurred during excavation.

A section drawing of the "bank near where the flute was found" also records two layers. The upper one was 30.5 cm in depth and contained many obsidian flakes, while the lower layer was 22.9 cm deep. Bird and fish bone and an oven are also recorded, but not stratigraphically.





Figs. 9-12. Stone artefacts from Oue Pa. 9. Adze, 32604, excavated from area B1. 10. *Nguru*, 32582, from excavation T3. 11. Nephrite chisel, 32587. 12. Nephrite chisel pendant, 32599.

T4. On this terrace 30.1 sq m were excavated in 15.2 cm spits over a period of four days. With the exception of rabbit bones, found on the first day of work, none of the material recovered was post-European. The rabbit bones were found at a depth of 7.7 cm and are, therefore, most likely to have been an intrusion into the site. The cultural deposits were deep, 1.07 m being recorded for the southern end of the plot. There is not, however, any record of stratigraphic divisions. Cultural material excavated from the plot is listed in Table 8. Two ovens were found in the northern half of the excavation, at depths of 45.8 cm and 76.2 cm. Since no artefacts were derived from the 30.5 cm which separate them it is possible that there was a non-cultural layer between. However, descriptions of the soil horizons encountered and the degree of slope of the excavation (if any) are not available. Nor is the number of artefacts recovered sufficient to do a statistical analysis, by level, of their distribution. It cannot, therefore, be inferred that there were two distinct cultural layers within the excavated area.

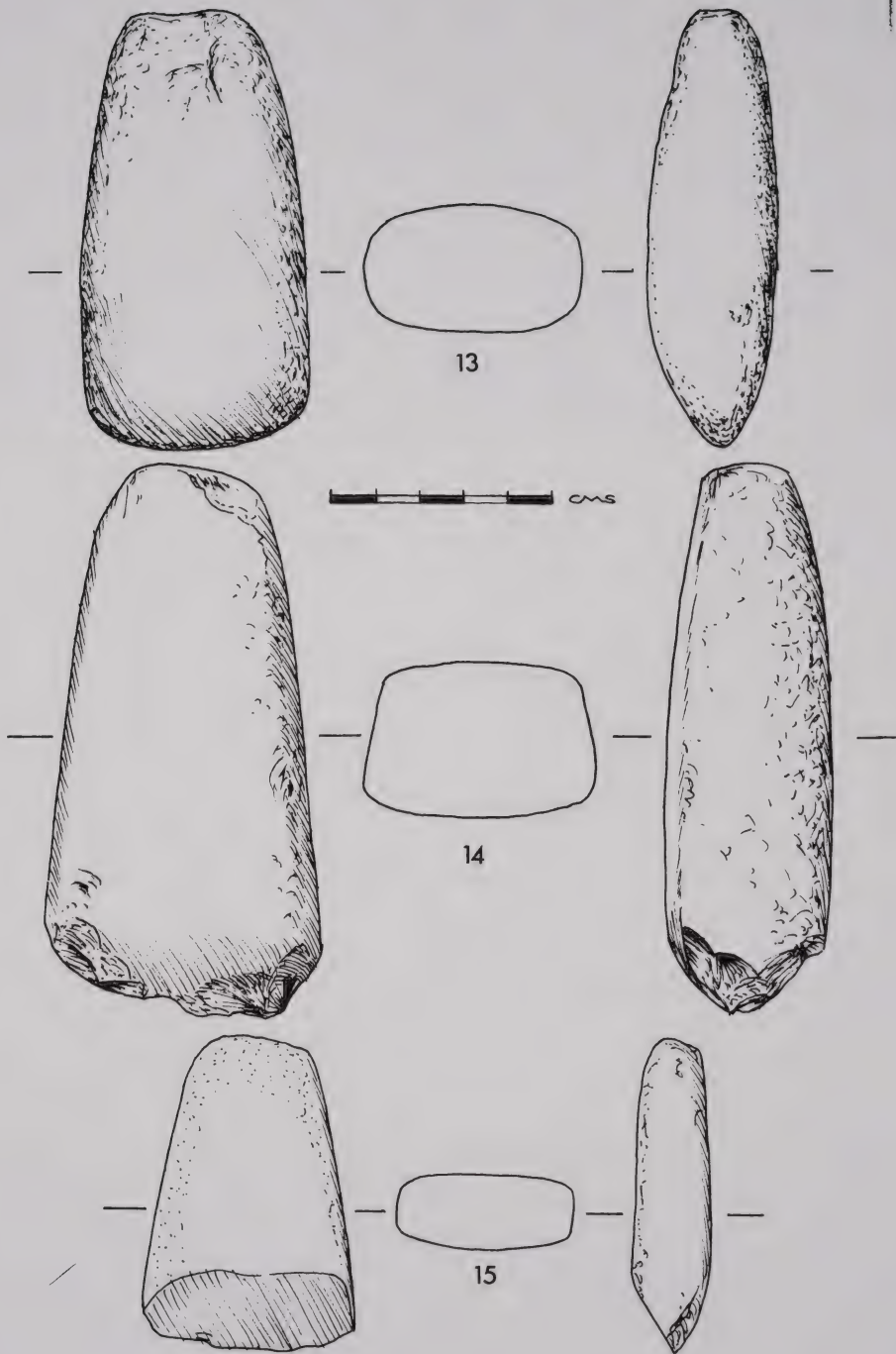
Table 8. Cultural material found in excavation T4.

Object	Grid	Depth (cm)	Comments
Unfinished shell pendant	2.2	surface	Not in museum's collection
Rabbit bones	7.3	7.6	Possibly an intrusion into site
Dog tooth	4	15.2	
Unfinished <i>nguru</i>	8.1	15.2	Not in museum's collections
Dog tooth	9	30.5	
Human bone (worked)	2	30.5	
Oven	1	45.8	
Stingray palate	2	45.8	
Bird spear point	5	45.8	Made of stingray barb. ?Not in museums's collections
Oven	4	76.2	
Fish hook point	8.4	76.2	?Not in museum's collections
Fish hook point	7.2	91.4	?Not in museum's collections
Human bone (worked)	4	106.7	
Bird bone	1.3	—	Identified in 1952 as that of a kingfisher

T5. Only one artefact, a fish hook point, was found in this excavation. No further details of the investigation are known.

#### *Other finds*

Many of the artefacts excavated from Oue Pa in 1952 and 1953 are in the Auckland Museum but cannot now be localised to excavated area. Other artefacts in the collection are provenanced to a general area within the pa but are either not mentioned in the fieldnotes or not described fully enough to enable a positive association with excavated area. Only the more important of these are included in this report.

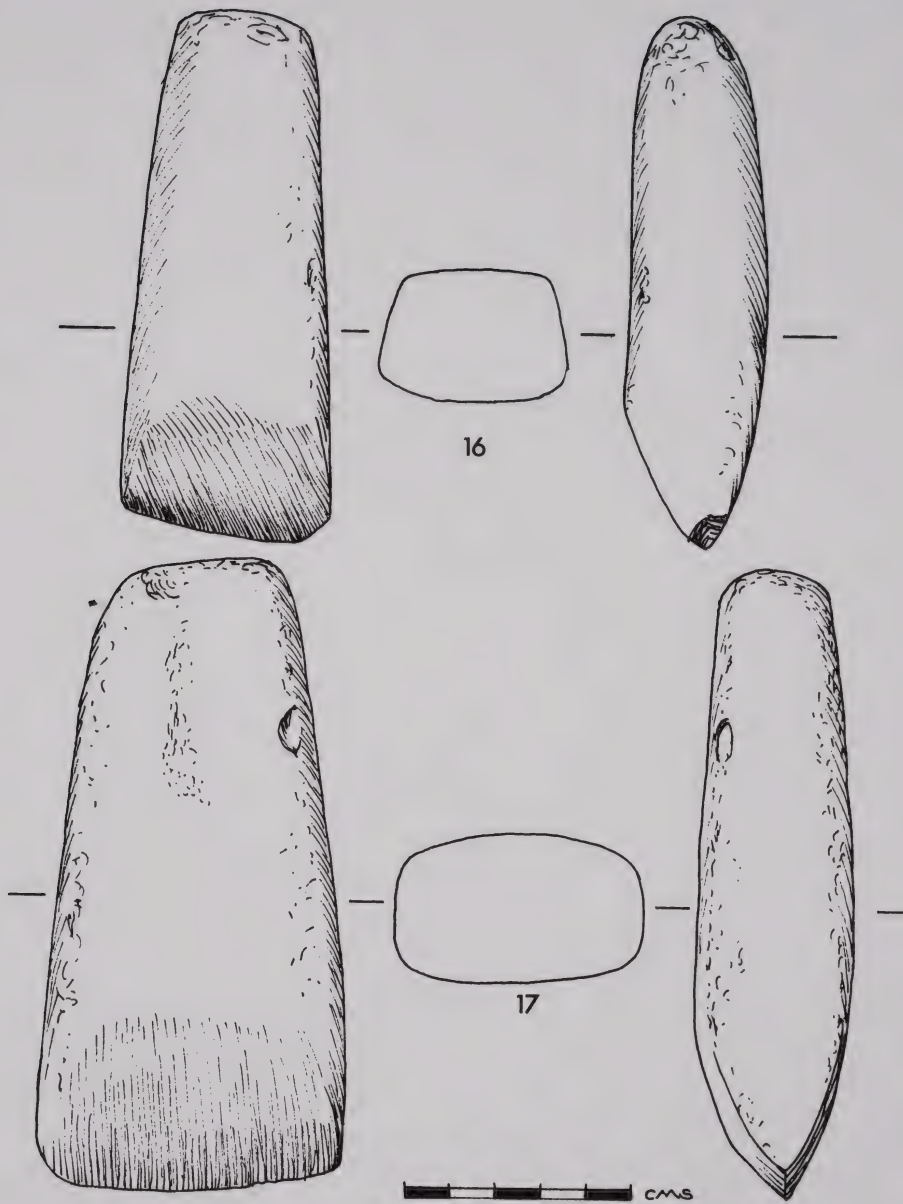


Figs. 13-15. Adzes from Oue Pa. 13. 32606. 14. 206/51. 15. 32611.1.

A description of an unlocalised chisel (Fig. 11), a chisel pendant (Fig. 12), an adze (Fig. 13) found on the mudflats, eight unlocalised adzes (of which four are illustrated, see Figs. 14-17), and an adze (Fig. 18) surface collected in 1968, is given in Table 9. Other stone artefacts found include a sinker (Fig. 19), a hammer (Fig. 20), two other hammerstones, a broken patu (Fig. 21), grinding stones, obsidian flakes and an obsidian core. A description of these is given in Table 10. A fernroot beater (Fig. 22), a top (Fig. 23) and another wooden artefact, possibly the handle of a beater (Fig. 24) are described in Table 11.

Table 9. Unprovenanced adzes and chisels from Oue Pa.

Museum No.	Fig.	Provenance	Comments
32606	13	Surface Mudflats	Dark grey argillite, Duff type 2B. partly polished Length, 9.9 cm.
206/51	14	Unlocalised	Dark grey argillite. Duff type 2B. Broken 12.5 cm from poll. Polished
32611.1	15	Unlocalised	Green/brown argillite. Duff type 2B Polished L, 14.1 cm
32611.2	—	Unlocalised	Grey argillite. Duff type 2B Polished and chipped. L, 14.9 cm
32611.3	16	Unlocalised	Dark grey argillite Duff type 2B. Polished L, 11.5 cm
32611.4	—	Unlocalised	Unseen. Length, 13.1 cm
32611.5	—	Unlocalised	Grey argillite Duff type 2B. Polished. L, 5.5 cm
32611.6	—	Unlocalised	Grey/green greywacke. Duff type 2B. Polished. L, 7.0 cm
32611.7	17	Unlocalised	Grey argillite Duff type 2B. Polished. L, 7.1 cm
39537	18	Surface (1968)	Green argillite. Triangular in cross section. Front flaked sides have some of the original polish. Reworked from large quadrangular adze. L, 11.8 cm
33587 (chisel)	11	Unlocalised	Dark brown/grey argillite. Polished. Quad. in cross section. Working edge chipped. L, 6.1 cm
32599 (Pendant)	12	Unlocalised	Nephrite, quadrangular in cross section with chisel edge. Broken across perforation at poll. L, 3.0 cm



Figs. 16, 17. Adzes from Oue Pa. 16. 32611.3. 17. 32611.7.

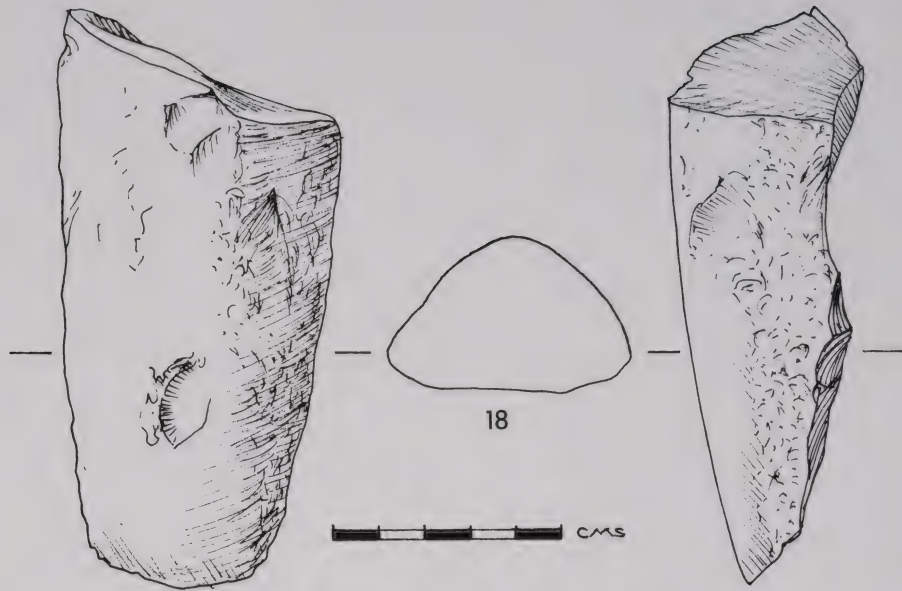
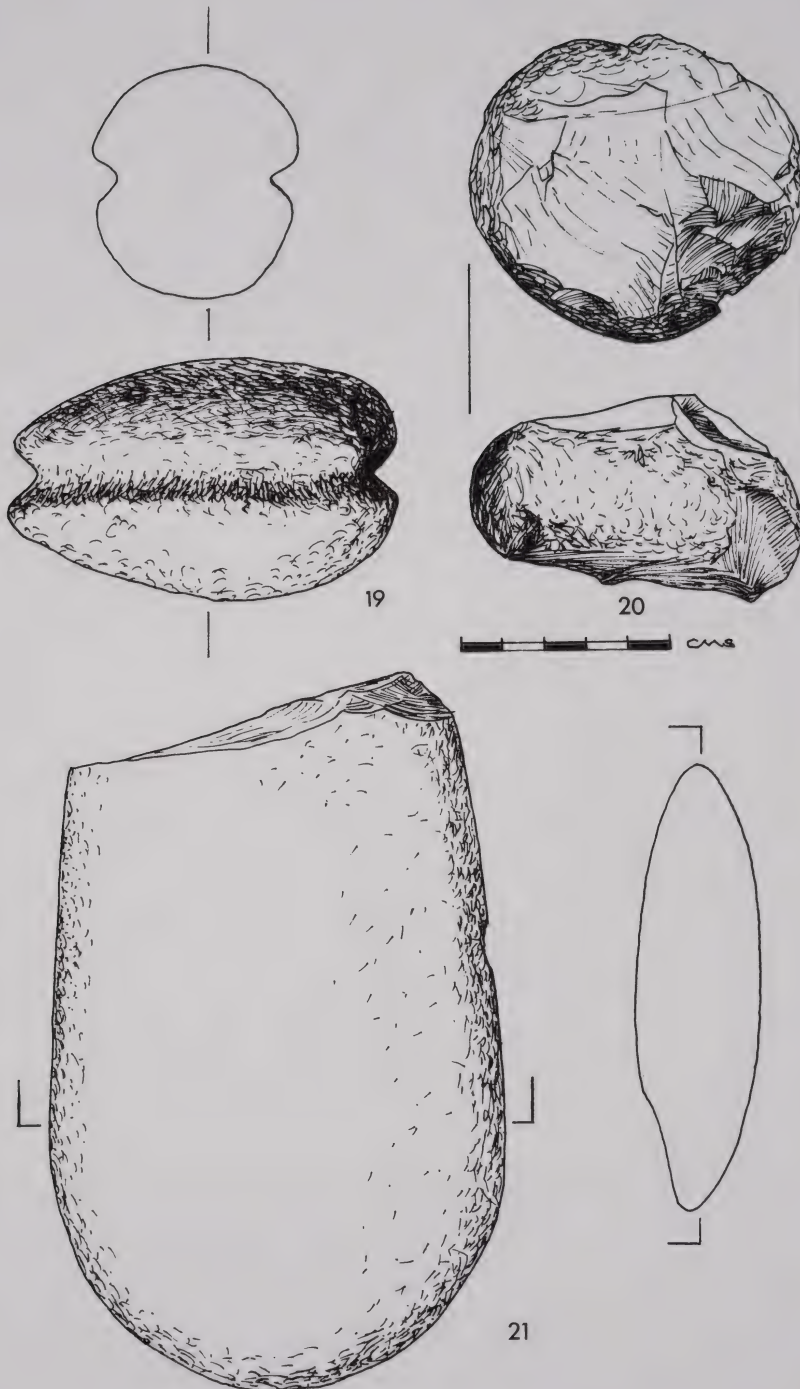


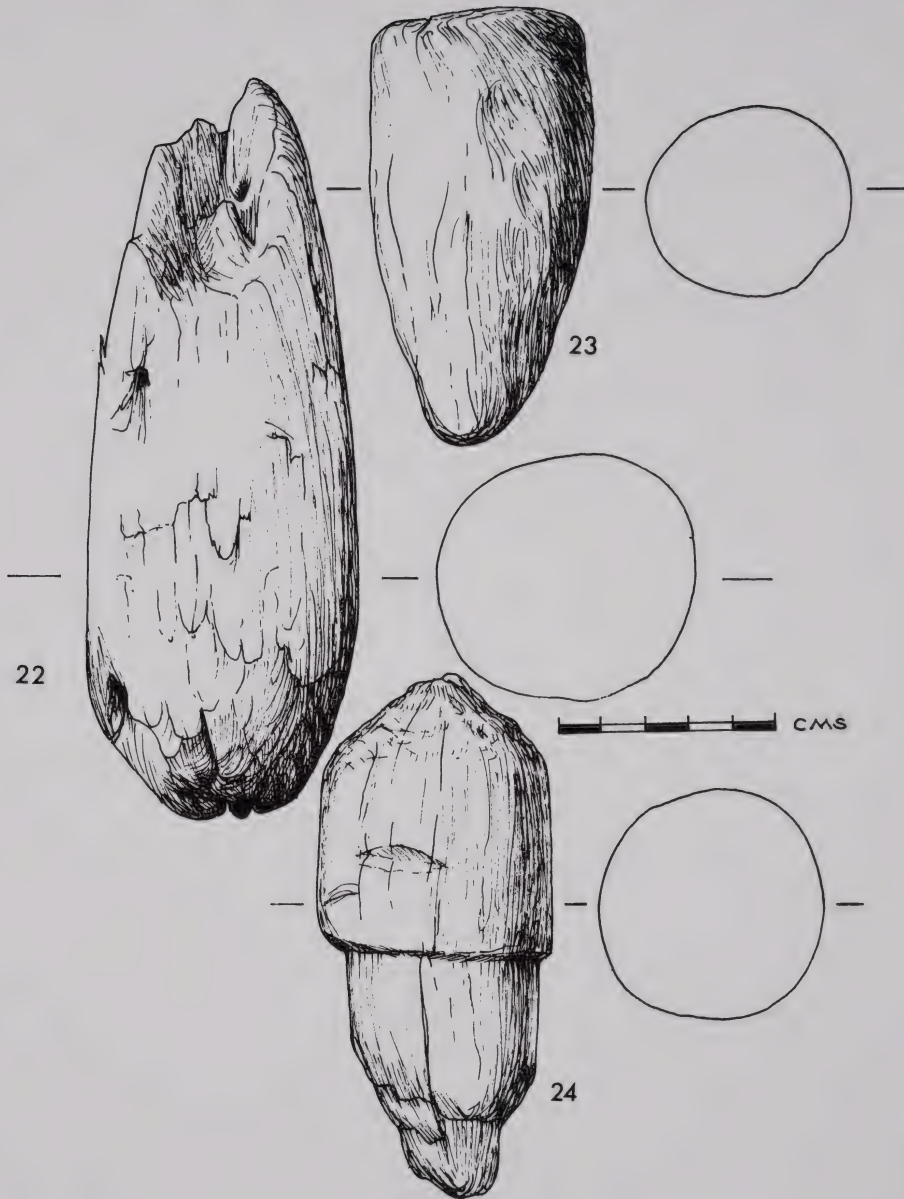
Fig. 18. Adze from Oue Pa. 32537.

Table 10. Unprovenanced other stone material from Oue Pa.

Artefact	Museum No.	Fig.	Provenance	Comments
Sinker	32590	19	Unloc.	Volcanic. Central Longitudinal groove. L, 9.3 cm
Patu	32608	21	Unloc.	Greywacke, unpolished. Handle broken off. L, 16.0 cm
Hammerstone	32590	—	Terrace (1951) ? Tihi	Pebble, bruised flat both ends. Traces of red ochre. L, 5.8 cm
Hammerstone	32591	—	''	Pebble, worn to cone shaped points each end. L, 11.3 cm
Hammer	39539	20	Surface (1968)	Discoïd, brownish grey chert. Worn around perimeter. Diam, 8.2 cm
Grindingstones (2)	32610	—	Unloc.	Sandstone. Both grooved through use.
Obsidian flakes (7)	—	—	Unloc.	3 green, 4 grey. Some with use damage
Obsidian core	—	—	Unloc.	Small, green



Figs. 19-21. Stone artefacts from Oue Pa. 19. Sinker, 32590. 20. Hammerstone, 39539. 21. Patu, 32608.



Figs. 22-24. Wooden artefacts from Oue Pa. 22. Fernroot beater. 23. Top. 24. ?Handle of beater.



Table 11. Unprovenanced wooden artefacts from Oue Pa.

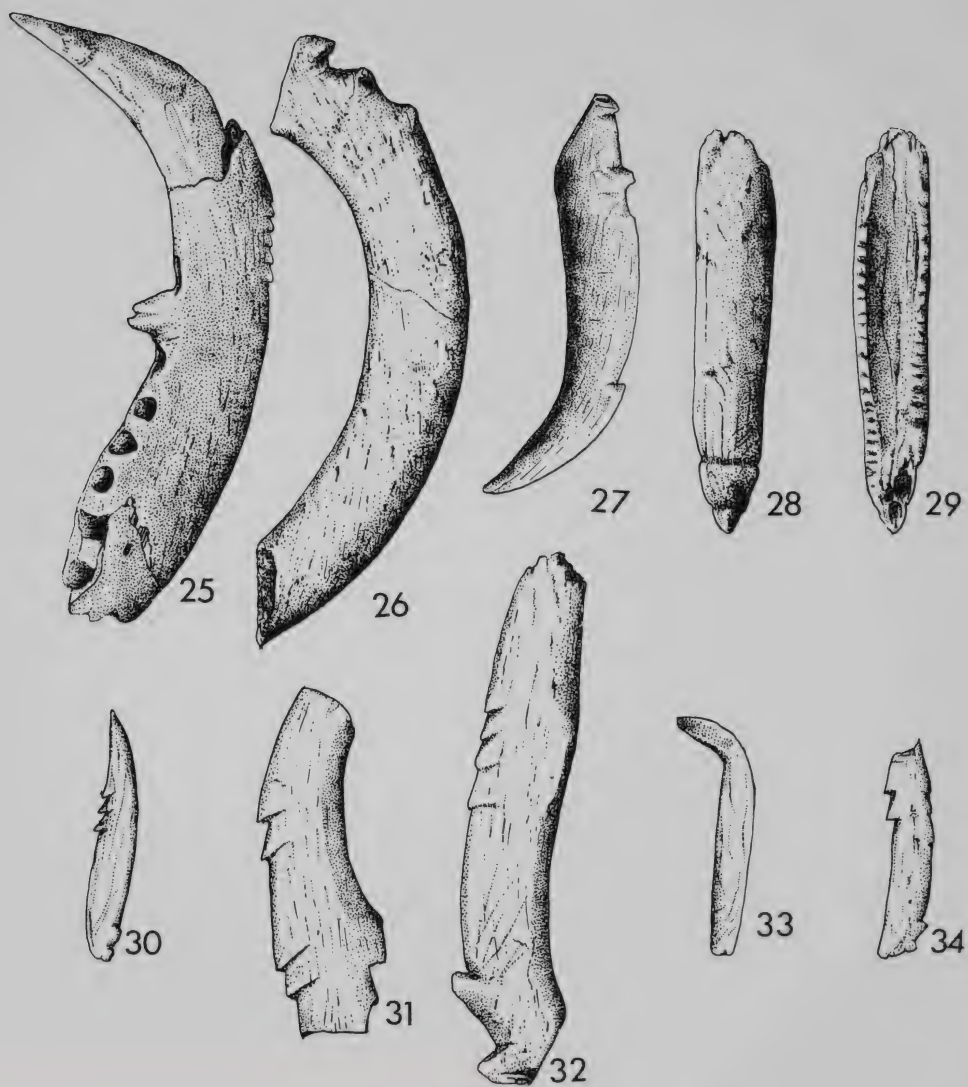
Artefacts	Museum No.	Fig.	Provenance	Comments
Top	32580	23	Unloc.	Cone shaped with point showing signs of use. L, 9.8 cm Diam prox. end, 4.7 x 5.4 cm
Fernroot Beater	32607	22	Mudflats (surface)	Handle broken off. Weathered and insect holes on one side. Length, 16.8 cm
?Handle of Beater	32578	24	Unloc.	Burnt & broken at distal end. Length, 11.7 cm

Table 12 includes a composite bait hook shank (Fig. 26) and point (Fig. 27) which were found in association at the base of the pa, another shank (Figs. 28-29) and composite bait hook points (Figs. 25, 30-32) also found at the base of the pa and two unlocalised points (Figs. 33-34). Four bird spear points (of which two are illustrated, see Figs. 35-36), tattooing chisels, a dog bone chisel (Fig. 37), a toggle (Fig. 38), a needle (Fig. 39) and a worked echinoderm spine (Fig. 40) found on the site are described in Table 13.

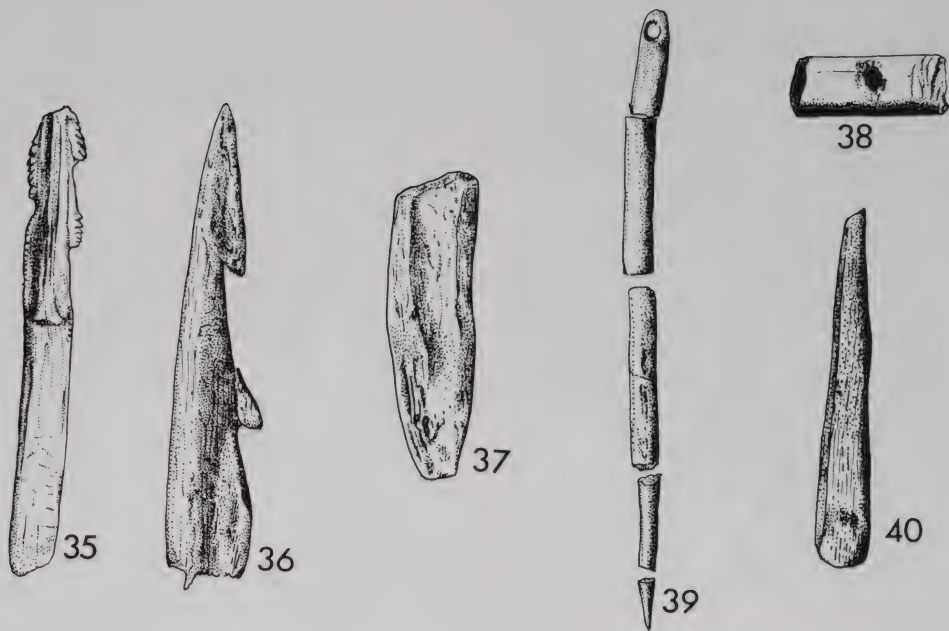
Table 12. Unprovenanced composite bait hooks from Oue Pa.

Artefact	Museum No.	Fig.	Provenance	Comments
Point	32592	25	Base of Pa	Unfinished point of dog bone (mandible)
Shank	32579.1	26	Base of Pa	Broken. Dog bone. Found in association with 32579.2
Point	32579.2	27	"	Dog bone. One external barb
Shank	32595	28&29	Base of Pa	Dog mandible. Internal side hollowed. Incised with series lines along internal edges
Point	32600	30	Base of Pa	Bird bone. 3 internal barbs
Point	32584.1	31	Base of Pa	Broken both ends. Internally and externally barbed. Dog bone
Point	32584.2	32	Base of Pa	Broken, dog bone. Internally and externally barbed
Point	—	33	Unloc.	Bird bone. Incurved point. Possibly unfinished. Unbarbed
Point	—	34	Unloc.	?bird bone. Multibarbed — internally and externally

There are several other pieces of worked and unworked whale, dog, human and rat bone and dog, pig and human teeth. The stingray palates found are those of *Dasyatis* sp. (J. Darby pers. comm.). Altogether there are seven pieces of unworked dog mandibles in the assemblage. Of these, five (3 lefts and 2 rights) were found at the base of the pa in 1951. A further left side from the 1953 terrace excavation (T2) has survived and an unlocalised fragment of a left mandible found in either 1952 or 1953.



Figs. 25-34. Composite bait hook shanks and points from Oue Pa. 25. Unfinished point, 32592. 26. Shank, 32579.1. 27. Point, 32579.2. 28, 29. Shank, 32595. 30. Point, 32600. 31. Point, 32584.1. 32. Point, 32584.2. 33, 34. Points, unnumbered.



Figs. 35-40. Bone artefacts from Oue Pa. 35. Bird spear point, 32587. 36. Bird spear point, 32602. 37. Chisel, 32601. 38. Toggle, 32585. 39. Needle, 32596. 40. ?Chisel, 32598.

Table 13. Unprovenanced other bone artefacts from Oue Pa.

Artefact type	Museum No.	Fig.	Provenance	Comments
Bird spear point	32577.1	—	Unloc.	<i>Myliobatis</i> sp. barb. Modified at proximal end for insertion into shaft. Several small 'teeth' removed from each side
Bird spear point	32577.2	—	Unloc.	<i>Myliobatis</i> sp. barb. Modified at proximal end
Bird spear point	32587	35	Terrace	<i>Myliobatis</i> sp. barb. 2 external, 1 internal barb, base modified
Bird spear point	32602	36	Unloc.	?Dog bone with 2 internal barbs. Broken
Tattooing chisel	32594	—	Base of pa	Not seen
Tattooing chisel	32593	—	Base of pa	Toothed and perforated. Not seen.
Chisel	32601	37	Base of pa	Dog bone with chisel edge at one end
Toggle	32585	38	Either B2 or T1	Bird bone tube, perforated
Needle	32596	39	Terrace	Echinoderm spine. Perforated at proximal end. Broken
?Chisel	32598	40	Unloc.	Echinoderm spine. Elongated with very small chisel edge at one end

## DISCUSSION

Traditionally Oue Pa was occupied in the early nineteenth century. During the Maori Land Court hearing of the claims to the Whakakaiwhara Block in 1866 (Maori Land Court 1866) a dispute arose between Ngaitai (a semi-autonomous *hapu* of Ngati Paoa) and Te Hingawaka (a *hapu* of Ngati Paoa) over ownership of Oue Pa. Evidence presented to the Court in support of Te Hingawaka's successful claim to Oue and the surrounding 63 acres (25.5 hectares) was to the effect that Te Hingawaka had lived at Oue in the "old days" until 1821 when Hongi Hika's arrival caused them to abandon the area and move into the Waikato. A disagreement with the Waikato tribes (probably in 1831, see Fenton 1879:68) resulted in their return to Hauraki where Te Hingawaka once again took possession of Oue. They lived there continuously until trouble broke out between the Maoris and the European settlers in 1863.

The archaeological evidence presented above indicates that this post-European settlement was around the base of the pa, particularly on the Northwest side and the sandspit. In addition, the stratigraphy of the excavation under the karaka tree (area B1) indicates that there was a pre-European occupation here as well. On top of the pa there is no evidence of a post-European occupation: therefore the two cultural layers must be attributed to an earlier period. Whether these represent two separate occupations cannot be determined from the data.

There is little information available about the economy represented in the northern area. Fragmentary shell deposits were found throughout most of the excavations and fish, bird, pig and rat bone were also recorded in various places. An oven on the western side of the pa contained cockles, scallops, fish and bird bone. In addition, some information can be obtained from the artefacts; there was a considerable quantity of industrial dog bone and stingray barbs and a fernroot beater was found.

The southern area of the pa is poorly represented by excavation. Only one area which is not a midden was investigated and the report of it is unsatisfactory. The locations of the midden mounds, however, suggest that they were formed during the occupation of the southern area and their sheer volume argues for an extensive occupation.

The shellfish species in the midden show that the occupants were exploiting a wide range of ecological zones. The most important shellfish, cockles, are available in the estuary around the pa. Pips can be obtained there as well and scallops were present in the estuary until the 1930s (C. Duder pers. comm.). Mussels may have been obtained from the rocky shores of the Whakakaiwhara Peninsula a few kilometres to the north.

Unfortunately no samples of bird and fish bone were kept. The number and species of birds available from the surrounding mudflats, swampland and bush covered ranges to the west must have been considerable. The mudflats and deeper waters of the Hauraki Gulf also must have provided an abundant marine life for ready exploitation.

There are no kumara storage pits on Oue Pa. This is unusual in an area where there is plenty of agricultural land available and the climatic conditions are suited to kumara cultivation. A plan of Whakakaiwhara Block drawn for the Maori Land Court on November 18, 1865, shows areas of "native cultivations" immediately to the south and

northwest of Oue Pa. The archaeological evidence argues against sporadic occupation in times of trouble; it is more likely that the kumara were stored elsewhere. Approximately 500 m to the southeast of Oue Pa lies another headland pa, N43/36. This contains at least 40 pits within the defended area (Easedale MS.). Little is known about the history of this site; it may well have been used, when required, for storage by the occupants of Oue Pa.

The number of dog mandibles, fish hooks and grinding stones show that the manufacture of composite bait hooks was one important activity being carried out at Oue Pa. It is likely that bird spear points were also made *in situ*. There is no evidence to suggest that adzes were being manufactured. Indeed the evidence is to the contrary; no flakes apart from obsidian were noted as present. The wooden top, the *nguru* and the number of clay pipes found indicate that time was taken for music and games.

The artefactual material recovered from Oue Pa shows marked similarities to the Classic Maori assemblage from Oruarangi Pa (N49/28) on the eastern side of the Hauraki Plains, near Thames.

With the exception of an unfinished adze (39357 Fig. 18), the adzes found at Oue Pa all fall within the range of those described by Fisher (1936) as type A and B from Oruarangi (see also Shawcross & Terrell 1966, Best 1980). They are quadrangular in cross section with the front usually wider than the back, polished on all surfaces and untanged.

The composite bait hook points also are similar in type to some of those from Oruarangi (see Fisher 1935, Teviotdale & Skinner 1947) although there are no "Oruarangi Points". There is, however, one point with a single external barb (32579.2, Fig. 27). The absence of dog tooth points from Oue Pa is surprising given the amount of dog material on the site. A preliminary examination of the dog bone suggests that the dogs were immature or young animals when they died (J. Darby pers. comm.) so it may be that the teeth were unsuitable for fish hook manufacture. Bird spear points made from stingray barbs were also reported from Oruarangi (Fisher 1934). They do not appear to have been notched, as one of the Oue Pa examples is, but were identified as bird spear points on the basis of the modification of the proximal edge (Fisher *ibid.*).

The *nguru* from Oue Pa is also similar to those found at Oruarangi. All eight measured by Fisher (1937) have two stops; the three complete examples from Oruarangi in the Otago Museum's collections also have two stops. A number of the *nguru* are decorated, their dimensions are variable and they are made from a number of materials, including sandstone. The Oue Pa example is decorated, made of sandstone and falls within the size range of the Oruarangi ones, but it has three stops.

The long history of archaic and Classic Maori occupation of Oruarangi Pa has recently been discussed by Best (1980). While 20% of the adzes, the stone reels, one piece bait hooks and possibly the *waha ika* (Best *ibid.*) from Oruarangi possess archaic affinities, the Oue Pa assemblage, discussed above, does not share these characteristics.

## CONCLUSIONS

The archaeological evidence presented shows that there were at least two, possibly three, occupations of Oue Pa. There was an extensive post-European settlement, which traditional history indicates was finally abandoned in 1863, around the base of the pa. This area and the top of the pa were occupied in the pre-European period as well. There are no dates for this occupation. However, a comparison of the artefacts with those from Oruarangi suggests that it dates to the late pre-European period.

Clearly further investigation of Oue Pa is worthwhile and may well help to elucidate some of the problems surrounding the definition of the Classic Maori period in New Zealand.

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Mr D. Simmons (Ethnologist, Auckland Museum) kindly gave me permission to study the Oue artefactual assemblage and manuscripts in the museum in 1977 and 1980. Ms Janet Davidson (University of Otago) and Dr A.J. Anderson (University of Otago) have both given helpful comments on this paper. Dr A. Reay (University of Otago) identified the stone and Mr J. Darby (Otago Museum) the bone material. The illustrations were done by Mr L. Cowell and Mr L. Esler (Otago Museum).

Finally I would like to thank Lady Aileen Fox (Auckland Museum) for her continued interest and encouragement during the preparation of this report.

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